

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 15 JUN 2004



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Applicant's or agent's file reference 010302WOWZF	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/US 03/12474	International filing date (day/month/year) 22.04.2003	Priority date (day/month/year) 23.04.2002
International Patent Classification (IPC) or both national classification and IPC F41H3/02, F41H3/02		
Applicant OMNOVA WALLCOVERING (UK) LIMITED ET AL.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  30.10.2003	Date of completion of this report  15.06.2004
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Giesen, M  Telephone No. +31 70 340-3747  

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**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-16 as originally filed

**Claims, Numbers**

1-10 as originally filed

**Drawings, Sheets**

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**IV. Lack of unity of invention**

1. In response to the invitation to restrict or pay additional fees, the applicant has:

- ☐ restricted the claims.  
☐ paid additional fees.  
☐ paid additional fees under protest.  
☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.  
☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.  
☐ the parts relating to claims Nos. .

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	5-10
	No: Claims	1-4
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Re Item IV**

**Lack of unity of invention**

1. The requisite unity of invention (Rule 13.1 PCT) does not exist since there is no technical relationship involving one or more of the same or corresponding special technical features in the sense of Rule 13.2 PCT between the subject-matter of the following groups of dependent claims:

Claims 1 - 9 :

A covering for camouflage purposes comprising a sheet including a plurality of components, each component being capable of protecting a structure against detection by at least one sensing method, the covering having an adhesive exterior surface and an opposite surface which has an uneven surface profile.

Claim 10 :

A system for camouflaging surfaces comprising:

- a first elongate sheet with two zones of different appearances, one side of each zone running continuously along a respective side of the sheet and the other side of each zone being delimited by an undulating boundary line; and
- a second elongate sheet having a continuous field of the first appearance within which are disposed isolated regions of the second appearance,
- each said first and second elongate sheets being capable of being sectioned with the resulting sections being capable of being joined to other sections.

2. The definitions of the different groups of claims are only intended to identify their subject matter in a concise manner. They may well, as such, comprise terms or generalisations which, upon a close analysis could be found to extend the defined subject matter beyond the content of the application as filed.
3. US 4 953 922 A (D1), which is considered to represent the nearest prior art, discloses a covering for application to one or more surfaces of a structure, the covering comprising a sheet including a plurality of components, each of said components being capable of providing protecting against detection by at least one sensing method, the covering having an adhesive exterior surface and an exterior surface opposite the adhesive surface having an uneven surface profile.

Furthermore D1 discloses that the sensing methods include visible inspection, surface profiling, near infra-red sensing, thermal infra-red sensing and radar detection.

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The covering according to D1 includes metallic film which is transparent to thermal infra-red radiation.

4. Since all non-optional features of present claim 1 (see also point V below), as well as the features of dependent claims 2 - 4 are consequently known from D1, the special technical features, as defined in Rule 13.2 PCT, of the first group of claims (claims 1 - 9), which are intended to be a contribution over D1, i.e. the features of dependent claims 5 - 9 :

5. radio absorbing means;
6. phase change material;
7. acoustic absorbing means;
8. flexibility; and
9. printed image representing environmental background,

apparently solve the problem of providing protection against additional methods of detection combined with flexibility.

5. The special technical features, as defined in Rule 13.2 PCT, of the second group of claims (claim 10), which are intended to be a contribution over D1, i.e. the features:
- a. a first elongate sheet with two zones of different appearances, one side of each zone running continuously along a respective side of the sheet, the other side of each zone being delimited by an undulating boundary line; and
  - b. a second elongate sheet having a continuous field of the first appearance within which are disposed isolated regions of the second appearance; and
  - c. the sheets being capable of being sectioned with the resulting sections being capable of being joined to other sections,

apparently solve the problem of manipulation and storage of large sheets of camouflage material (see the description page 16, lines 8 - 10).

6. Between the respective concepts of the indicated groups of claims no same or similar special technical features can be determined and different underlying problems are solved. Moreover, it is clear that the claimed concepts can be applied independently of each other, i.e. they are not necessarily inter-related.

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It appears therefore, that no technical relationship between the various claimed concepts exists involving one or more of the same or corresponding special technical features, beside the common and already well known features of D1 as indicated in point IV-3 above. The indicated groups of claims are thus not so linked as to form a single general inventive concept.

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The application does not meet the requirement of clarity of Article 6 PCT.

The expression:

" said covering **optionally** further comprising a ..... surface.", in claim 1 renders this claim and consequently the application unclear.

2. US 4 953 922 A (D1), which is considered to represent the nearest prior art, discloses a covering for application to one or more surfaces of a structure, the covering comprising a sheet including a plurality of components, each of said components being capable of providing protecting against detection by at least one sensing method, the covering having an adhesive exterior surface and an exterior surface opposite the adhesive surface having an uneven surface profile.

Consequently, the subject matter of independent claim 1 is not novel (Art.33(2) PCT).

3. Dependent claims 2 - 9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows:

The features of dependent claims 2 - 4 and 8 are known from D1.

The features of dependent claims 5 and 7 are known from US 5 312 678 A (D2).

The features of dependent claim 6 are known from US 6 373 058 B1 (D3).

The features of dependent claim 9 are obvious to the man skilled in the art of flexible camouflage systems.

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4. In respect of independent claim 10, WO 95 08435 A (D4) (in particular figures 11, 13 and 14) describes

A system for camouflaging surfaces comprising:

- a first elongate sheet patterend with two zones, the zones having different appearances, each zone extending along a primary dimension of the sheet,
- a second elongate sheet having a continuous field of the first appearance within which are disposed isolated regions of the second appearance,
- each of said first and second elongate sheets being capable of being sectioned with the resulting sections being capable of being combined with other sections so as to form a camouflage pattern.

The subject matter of independent claim 10 differs from this prior art, in that one side of each zone of the first elongate sheet runs continuously along a respective side of the sheet and the other side of said zone is delimited by a boundary extending along the relatively long dimension of the sheet in a generally undulating form, such that all regions of the sheet on one side of the boundary form a zone of a first appearance and all regions of the sheet on the other side of the boundary form a zone of a second appearance.

These features are already suggested by US 6 127 007 A (D5) for a similar type of camouflage. Consequently, on the basis of a combination of the teachings of D4 and D5, no inventive step appears to be present in the subject matter of independent claim 10.

5. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.